

Time - Three hours

Full Marks - 100

The figures in the margin indicate full marks for the questions.

Candidates are required to give their answers in their own words as far as practicable.

Gandhi once said, "There comes a time when an individual become irrestible and his action becomes all-pervasive in its effect. This comes when he reduces himself to zero." Gandhi's words may appear awkward for leaders whose basis of power is centred on title, designation, qualifications, perks, paycheques and a grand self-image. Yet when we examine Gandhi's statement with objectivity, we realise its validity. First, let us understand what Gandhi means by the expression "reduces himself to zero." Ordinarily the symbol 0 (zero) gives us an impression of nothingness.

Yet we know that zero is a powerful entity in the world of Mathematics. In real terms, zero may not appear to have a tangible, material value. But we all know that it has positional value in the sense that it can "create" great value when placed after a number. A zero can fundamentally alter the quantitative and qualitative value of any given number. Zero is indeed the domain of infinite potentiality. Any number divided by zero bocomes infinity. A number multiplied by zero assumes the nonfinite quality of zero itself. We can say, the symbol 0 has a touch of the infinite in it. It implies not only emptiness of matter but also the fullness of a non-material presence.

Isaac Asimov traces the history of 0 to India. According to him, 0 travelled from India with Arabs to Western Europe in the Middle Ages. The Arabs called that symbol "sifr", which means "empty". This came in the English language as "cipher' which means "to solve an arithmetical problem". From cipher we get the word decipher which means "to find the meaning of something which is puzzling".

In India, where the symbol was supposed to have originated, the zero is known as "shunnyo" or the void. The great Indian minds were not content with using zero as a symbol or a concept. They wanted to understand 0 as a real experience.

Buddha's experience of "nirvana" was nothing but the qualitative experience of zero. The Buddhists call it "shunnyata". This was Buddha's experience of the field of consciousness free of objects. In reality, an object is something that objects or hinders the flow of consciousness. This unhindered flow of consciousness is the ultimate goal. Therefore, 0 is a powerful metaphor for the reality of our existence. The zero is something of nothing that none of us can comprehend.

[Turn over

As we move to the understanding of zero, we know why Gandhi urged us to reduce ourselves to zero. Cosmocentric consciousness is our natural state. Leaders are in touch with this cosmic consciousness and its creative rhythm. The leader-follower relationship is the unity of this consciousness. It is a bond of equality.

- (a) What is the concept of zero in Mathematics?
- (b) State, after Asimov, the history of zero.
- (c) What was the Indian idea of the zero?
- (d) How did Buddha interpret it?
- (e) Why Gandhi says reducing "himself to zero" is the source of power for a leader?
- (f) Suggest a title for the piece.

6×5=30

Or

Once a child asked me if I had read the Mahabharata and if so, who my favourite character in it was. The multifaceted characters in the epic represent almost every aspect of human nature, good as well as bad. I told the child that I was particularly attracted to the character of Vidura, who showed grit against the wrongdoings of authority and had the courage to differ when everyone else chose to surrender before the tyranny of adharma. Today, it is hard for us to find one true Vidura among our leaders. It is hard for us to imagine such an enlightened being and even harder for us to aim for such enlightenment. More discouraging still is the quality of public life today, the low level of discourse and the presence of so much ego, anger, greed, jealousy, spite, cruelty, lust, fear, anxiety and turmoil. I felt a new determination dawning inside me.

In this my most important decision I decided to help discover the nature of India's true self in its children. My own work and indeed I as a person were relegated to the background. My scientific career, my teams, my awards, all this became secondary. I wanted instead to be a part of the eternal intelligence that is India. I hoped to transcend myself and discover the inner, higher self that is in us through my interaction with joyous

A man is said to pass through different stages in his lifetime. Dr. Wayne W. Dyer in his book Manifest Your Destiny, makes an interesting categorisation of them as athlete stage, warrior stage, states person stage and spirit stage. It occurred to me that nations too make a similar transition and in extending this analogy to them I have termed the last two a similar transition and self realization stages respectively. The stages do not follow in stages big brother as stages do sequence necessarily; they can be coexistent, with one aspect dominant.

In the first, athlete stage, a nation fresh from an independence struggle, or some other In the first, athlete suge, transition, embarks on an energetic pursuit of performance and achievement. This has

When a nation leaves this stage behind, it generally enters the warrior stage. Proud of its achievements, it finds ways to demonstrate its superiority over others, perhaps through conquest. Ego is the driving force. During this stage people are busy with goals and achievements in competition with others, and this, as Dyer points out for the individual, generates anxiety. Convincing others of its superiority becomes the theme.

In the next, big brother stage, the ego has been tamed somewhat and with its newfound maturity awareness shifts to what is important to other nations and societies. In the big brother stage the nation is still an achiever but it is not so obsessed with proving its strength. The idea is to help others become better. The erstwhile Soviet Union by its developmental role in some countries had adopted this role. As with the individual. so too with the nation, the transition from the warrior stage to the big brother stage is a rewarding but difficult exercise.

There is one stage even higher than this big brother stage. In this, a nation recognizes its truest essence. It comes out of the wisdom that the earth is no single nation's inheritance but of all, and its people are aware of the responsibility of the individual towards his fellow human beings. This can be called the realization stage, and India may have the potential to achieve it.

- (a) What is the author's opinion of present day public life and leaders? How does he relate his favourite character from the Mahabharata with it? 3+2=5
- (b) What did the author decide to discover? What was his discovery? 3+2=5
- (c) How is the transition of a nation analogous to human life? What are the different stages?
- (d) How does a nation behave in warrior stage?
- (e) "There is one stage even higher than this big brother stage." What is the stage? What are its characteristics?
- (f) Suggest a title for the piece.
- Amplify any one of the following in 200 words:
 - (a) One who lives in a glass house must not throw stones at other
 - (b) God helps those who help themselves.
 - (c) Weary lies the head that wears a crown.
- Rewrite any five of the following sentences according to instruction given after each, without making any change in the meaning:
 - (a) "What is this strange outcry?" said Socrates. (Change to indirect)

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2/TR/CSPS(C)-2/15

(i) ill-will (ii) illness (iv) ill-luck (e) Stimulate: (i) decide (iii) excite (iv) instruct 6. Find out the antonyms (from the alternatives given) to the following words and frame meaningful sentences with the antonyms (not the words): (a) Gorgeous: (i) desperate (ii) desperate (iii) sumptuous (iv) plain (b) Lend: (i) hire (ii) pawn (iii) borrow (iii) borrow (iv) cheat (c) Obstinate: (i) inflexible (ii) prominent (d) Paucity: (i) surplus (ii) presence (ii) presence (iii) grantile (iv) sarcity (e) Synthetic: (ii) natural (iv) soft		(iii) undiscovered	(ii) defeated (iv) unconquerable
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(i) surplus (iii) dearth (ii) scarcity (ii) natural (i) cosmetic (iv) scarcity (ii) natural (iv) soft		(i) inflexible (iii) prominent	
(i) cosmetic (iv) soft		(i) surplus (iii) dearth	
(III) P ² (5) [Turn over 2/TR/CSPS(C)-2/15		(i) cosmetic (iii) plastic	(iv) soft

- Write a paragraph on any one of the following within 200 words:
 - (a) Condition of tourism in your state.
 - (b) Probable social measures for prevention of crime against women.
 - (c) Your idea of good governance.

